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Fifth Edition

Sybil P. Parker
Editor in Chief

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On the cover: Photomicrograph of crystals of vitamin B_1.
(*Dennis Kunkel, University of Hawaii*)

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APPENDIX 1

absolute stereochemistry *See* absolute configuration. ['ab sə,lüt ,ster·ē·ō'kem·ə·strē]

absolute stereoscopic parallax [GRAPHICS] Considering a pair of aerial photographs of equal principal distance, the absolute stereoscopic parallax of a point is the algebraic difference of the distances of the two images from their respective photograph nadirs, measured in a horizontal plane and parallel to the air base. Also known as absolute parallax; horizontal parallax; linear parallax; parallax; stereoscopic parallax; x-parallax. ['ab·sə,lüt ster·ē·ə'skäp·ik 'par·ə,laks]

absolute star [NAV] A navy signal which indicates that the train must make a full stop and not proceed until there is a change in the signal. Also known as stop and stay. ['ab·sə,lüt 'stär]

absolute system of units [PHYS] A set of units for measuring physical quantities, defined by interrelated equations in terms of arbitrary fundamental quantities of length, mass, time, and charge or current. ['ab·sə,lüt 'sis·təm əv 'yü·nəts]

absolute temperature [THERMO] 1. The temperature measurable in theory on the thermodynamic temperature scale. 2. The temperature in Celsius degrees relative to the absolute zero at −273.16°C (the Kelvin scale) or in Fahrenheit degrees relative to the absolute zero at −459.69°F (the Rankine scale). ['ab·sə,lüt 'tem·prə·chər]

absolute temperature scale [THERMO] A scale with which temperatures are measured relative to absolute zero. Also known as absolute scale. ['ab·sə,lüt 'tem·prə·chər ,skāl]

absolute term *See* constant term. ['ab·sə,lüt 'tərm]

absolute threshold [PHYSIOL] The minimum stimulus energy that an organism can detect. ['ab·sə,lüt 'thresh,hōld]

absolute time [GEOL] Geologic time measured in years, as determined by radioactive decay of elements. [PHYS] *See* absolute space-time. ['ab·sə,lüt 'tīm]

absolute unit [PHYS] A unit defined in terms of units of fundamental quantities such as length, time, mass, and charge or current. ['ab·sə,lüt 'yü·nət]

absolute vacuum [PHYS] Avoid completely empty of matter. Also known as perfect vacuum. ['ab·sə,lüt 'vak·yüm]

absolute value Also known as magnitude. [MATH] 1. For a real number, the number if it is nonnegative, and the negative of the number if it is negative. Also known as numerical value. 2. For a complex number, the square root of the sum of the squares of its real and imaginary parts. Also known as modulus. 3. The length of a vector, disregarding its direction; the square root of the sum of the squares of its orthogonal components. ['ab·sə,lüt 'val·yü]

absolute value computer [COMPUT SCI] A computer that processes the values of the variables rather than their increments. ['ab·sə,lüt 'val·yü kəm'pyüd·ər]

absolute vector [COMPUT SCI] In computer graphics, a vector whose end points are given in absolute coordinates. ['ab·sə,lüt 'vek·tər]

absolute velocity [PHYS] The vector sum of the velocity of a fluid parcel relative to the earth and the velocity of the parcel due to the earth's rotation; the east-west component is the only one affected. ['ab·sə,lüt və'läs·əd·ē]

absolute viscosity [PL MECH] The tangential force per unit area of two parallel planes at unit distance apart when the space between them is filled with a fluid and one plane moves with unit velocity in its own plane relative to the other. Also known as coefficient of viscosity. ['ab·sə,lüt vis'käs·əd·ē]

absolute volume [ENG] The total volume of the particles in a granular material, including both permeable and impermeable voids but excluding spaces between particles. ['ab·sə,lüt 'väl·yüm]

absolute vorticity [PL MECH] The vorticity of a fluid relative to an absolute coordinate system, especially, the vorticity of the atmosphere relative to axes not rotating with the earth. ['ab·sə,lüt vȯr'tis·əd·ē]

absolute wavemeter [ELECTROMAG] A type of wavemeter in which the frequency of an injected radio-frequency voltage is determined by measuring the length of a resonant line. ['ab·sə,lüt 'wāv,mēd·ər]

absolute weighing [ENG] Determination of the mass of a sample and expressing its value in units, fractions, and multiples of the mass of the prototype of the international kilogram. ['ab·sə,lüt 'wā·iŋ]

absolute zero [THERMO] The temperature of −273.16°C, or −459.69°F, or 0 K, thought to be the temperature at which molecular motion vanishes and a body would have no heat energy. ['ab·sə,lüt 'zir·ō]

absorb [CHEM] To take up a substance in bulk. [ELECTROMAG] To take up energy from radiation. [PHYS] To take up matter or radiation. [əb'sȯrb]

absorbance [PHYS CHEM] The common logarithm of the reciprocal of the transmittance of a pure solvent. Also known as absorbancy; extinction. [əb'sȯr·bəns]

absorbancy *See* absorbance. [əb'sȯr·bən·sē]

absorbancy index [ELEC] Charge on a capacitor which arises only gradually when the potential difference across the capacitor is maintained, due to gradual orientation of permanent dipolar molecules. [əb'sȯrbd 'chārj]

absorbed dose [MED] The part of an administered medication which is not excreted by the recipient's body. [NUCLEO] The amount of energy imparted by ionizing particles to a unit mass of irradiated material at a place of interest. Also known as dosage; dose. [əb'sȯrbd 'dōs]

absorbed-dose rate [NUCLEO] The absorbed dose of ionizing radiation imparted at a given location per unit of time (second, minute, hour, or day). [əb'sȯrbd 'dōs ,rāt]

absorbency [CHEM] Penetration of one substance into another. [əb'sȯr·bən·sē]

absorbancy index *See* absorptivity. [əb'sȯr·bən·sē 'in·deks]

absorbent [MATER] A material which, in contact with a liquid or gas, extracts one or more substances for which it has an affinity, and is altered physically or chemically during the process. [əb'sȯr·bənt]

absorbent cotton [MATER] A cotton fiber that absorbs water because its natural waxes have been removed. [əb'sȯr·bənt 'kät·ən]

absorbent paper [MATER] Paper capable of absorbing and holding liquids by the capillarity of the pores between or within the closely packed cellulosic fibers. [əb'sȯr·bənt 'pā·pər]

absorber [CHEM ENG] Equipment in which a gas is absorbed by contact with a liquid. [ELECTR] A material or device that takes up and dissipates radiated energy, may be used to shield an object from the energy, prevent reflection of the energy, determine the nature of the radiation, or selectively transmit one or more components of the radiation. [ENG] The surface on a solar collector that absorbs the solar radiation. [MECH ENG] 1. A device which holds liquid for the absorption of refrigerant vapor or other vapors. 2. That part of the low-pressure side of an absorption system used for absorbing refrigerant vapor. [NUCLEO] A material that absorbs neutrons or other ionizing radiation. [əb'sȯr·bər]

absorber capacity [CHEM ENG] During natural gas processing, the maximum volume of the gas that can be processed through an absorber without alteration of specified operating conditions. [əb'sȯr·bər kə,pas·əd·ē]

absorber control *See* absorption control. [əb'sȯr·bər kən'trōl]

absorber oil *See* absorption oil. [əb'sȯr·bər ,ȯil]

absorber plate [ENG] A part of a flat-plate solar collector that provides a surface for absorbing incident solar radiation. [əb'sȯr·bər ,plāt]

absorbing boom [CIV ENG] A device that floats on the water and is used to stop the spread of an oil spill and aid in its removal. [əb'sȯr·biŋ ,büm]

absorbing rod *See* control rod. [əb'sȯr·biŋ ,räd]

absorbing state [MATH] A special case of recurrent state in a Markov process in which the transition probability, P_{ii}, equals 1; a process will never leave an absorbing state once it enters. [əb'sȯr·biŋ ,stāt]

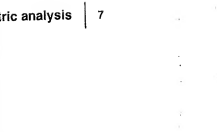
absorbing well [CIV ENG] A shaft that permits water to drain through an impermeable stratum to a permeable stratum. [əb'sȯr·biŋ ,wel]

absorptance [PHYS] The ratio of the total unabsorbed radiation to the total incident radiation; equal to one (unity) minus the transmittance. [əb'sȯrp·təns]

absorptiometer [ANALY CHEM] 1. An instrument equipped with a filter system or other simple dispersing system to measure the absorption of nearly monochromatic radiation in the visible range by a gas or a liquid, and so determine the concentration of the absorbing constituents in the gas or liquid. 2. A device for regulating the thickness of a liquid in spectrophotometry. [əb,sȯrp·sē'äm·əd·ər]

absorptiometric analysis [ANALY CHEM] Chemical analysis of a gas or a liquid by measurement of the peak electromagnetic

ABSOLUTE TEMPERATURE



Comparisons of Kelvin, Celsius, Rankine, and Fahrenheit temperature scales. Temperatures are rounded off to nearest degree. *(From H. W. Semonsky, Temperatures Very Low and Very High, Van Nostrand, 1964)*

conduit with respect to time;

e for switching a capacitor sud-
o a load through which it can

lamp in which light is produced
n electrodes in a gas (or vapor)
o known as electric-discharge
r lamp. [ˈdis,chärj ˌlamp]
gth of pipe through which drill
ump through the standpipe on
chärj ˌlin]
Liquid that has passed through
known as effluent; produce

s] A method of printing in
shaped to produce characters,
oals on a previously dyed fabric
nt a pattern. [ˈdis,chärj ˌprin-

upregnated cotton wick encased
aluminum mounting lug, used
a static. [ˈdis,shärjər]
evacuated enclosure containing
which current can flow when
tween metal electrodes in the
scharge tube. [MEECH ENG] A
vater are released into a boiler

[ENG] A device which detects
using a glass tube attached to a
e of leaked gas is indicated by
ge. [ˈdis,chärj ˌtub ˈlēk ˌin

stripping agent such as sodium
ove dyes from fabric that has
ˌchärj-ij ˌā-jənt]
A support built over, and not
ber, such as a wooden lintel, to
known as relieving arch.

turbance in the consciousness

ues with enlarged, dilatlike re-

[ˈdis-kə,förm]
ily of lamellate branchiopods
,dis-kə-ˈlāt-ē-ə]
ommunity that includes foreign
f the natural climax by humans
own as disturbance climax.

d coccolith. [dis-ˈkō-ə-stər]
astula formed by cleavage of a
is disk-shaped. [ˈdis-kō,plas

having a sucker on the head.

pe of spicule with eight rays
selliid sponges. [ˈdis-ˈkāl-ət

Having sucking disks on the

astrula formed from a blasto-

s family of anuran amphibians
Opisthocoela. [ˈdis-kō,gläs

nd circular in form. 2. Any
fis,kōid]
A type of cleavage producing
[dis-ˈkōid-əl ˈklē-vij]
ily of extinct conical or globe-
he order Helectopoida distin-
internal skeletal partitions.

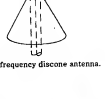
ivalent name for Lecanorales.

tropical log beetles, a family

of coleopteran insects in the superfamily Cucujoidea. [ˌdis-kō-ˈlär-ə,dē]
discomfort glare *See* glare. [dis-ˈkəm-fərt ˌgler]
discomfort index *See* temperature-humidity index. [dis-ˈkəm-fərt ˌin,dek-s]
discomposition [NUCLEO] The process in which an atom is knocked out of its position in a crystal lattice by direct nuclear impact, as by fast neutrons or by fast ions that have been previously knocked out of their lattice positions. [dis,kämpə,zish-ən]
discomposition effect [NUCLEO] Changes in physical or chemical properties of a substance caused by discomposition. Also known as Wigner effect. [dis,kämpə,zish-ən ˌi,fekt]
discomycetes [MYCOL] A group of fungi in the class Ascomycetes in which the surface of the fruiting body is exposed during maturation of the spores. [ˌdis-kō,mī-ˈsēd-ēz]
discone antenna [ELECTROMAG] A biconical antenna in which one of the cones is spread out to 180° to form a disk; the center conductor of the coaxial line terminates at the center of the disk, and the cable shield terminates at the vertex of the cone. [ˈdis,kōn ən-ˈten-ə]
disconformity [GEOL] Unconformity between parallel beds or strata. [ˌdis-kən-ˈfor-mə-dē]
disconnect [ELEC] To open a circuit by removing wires or connections, as distinguished from opening a switch to stop current flow. [ENG] To sever a connection. [ˌdis-kə-ˈnekt]
disconnected set [MATH] A set in a topological space that is the union of two nonempty sets A and B for which both the intersection of the closure of A with B and the intersection of the closure of B with A are empty. [ˌdis-kə,nek-təd ˈset]
disconnect fitting [ELEC] An electrical connection that can be disconnected without tools. [ˌdis-kə-ˈnekt ˌfid-iŋ]
disconnecting switch [ELEC] A switch that isolates a circuit or piece of electrical apparatus after interruption of the current. Also known as disconnector. [ˌdis-kə-ˈnek-tiŋ ˌswich]
disconnector *See* disconnecting switch. [ˌdis-kə-ˈnek-tər]
disconnector release [ELEC] Device which disengages the apparatus used in a telephone connection to restore it to its original condition when not in use. [ˌdis-kə-ˈnek-tər rē-ˈlēs]
discontinuity [ELECTROMAG] An abrupt change in the shape of a waveguide. Also known as waveguide discontinuity. [GEOL] 1. An interruption in sedimentation. 2. A surface that separates unrelated groups of rocks. [GEOPHYS] A boundary at which the velocity of seismic waves changes abruptly. [MATH] A point at which a function is not continuous. [MET] The place where the structural nature of a weldment is interfered with because of the materials involved or where the mechanical, physical, or metallurgical aspects are not homogeneous. [PHYS] A break in the continuity of a medium or material at which a reflection of wave energy can occur. [dis,kən-tə-ˈwə-ə-dē]
discontinuous amplifier [ELECTR] Amplifier in which the input waveform is reproduced on some type of averaging basis. [ˌdis-kən-ˈtin-yə-wəs ˈam-plə,fī-ər]
discontinuous coding sequence [MOL BIO] The coding sequence in deoxyribonucleic acid of eukaryotic split genes consisting of exons and introns. [ˌdis-kən-ˈtin-yə-wəs ˈkōd-iŋ ˌsē-kwəns]
discontinuous construction [BUILD] A building in which there is no solid connection between the rooms and the building structure or between different sections of the building; the design aims to reduce the transmission of noise. [ˌdis-kən-ˈtin-yə-wəs kən-ˈstrək-shən]
discontinuous phase *See* disperse phase. [ˌdis-kən-ˈtin-yə-wəs ˈfāz]
discontinuous precipitation [MET] Precipitation principally at and away from the grain boundaries in a supersaturated solid solution; diffraction patterns show two lattice parameters, the solute in solution and the precipitate. [ˌdis-kən-ˈtin-yə-wəs prə,sip-ə-ˈtā-shən]
discontinuous reaction series [GEOL] The branch of Bowen's reaction series that include olivine, pyroxene, amphibole, and biotite; each change in the series represents an abrupt change in phase. [ˌdis-kən-ˈtin-yə-wəs rē-ˈak-shən ˌsir-ēz]
discontinuous yielding [MET] The nonuniform plastic deformation of a metal along the length strained in tension. [ˌdis-kən-ˈtin-yə-wəs ˈyēld-iŋ]
discopodous [INV ZOO] Having a disk-shaped foot. [dis-ˈkäp-ə-dəs]

Discorbacea [INV ZOO] A superfamily of foraminiferan protozoans in the suborder Rotaliina characterized by a radial, perforate, calcitic test and a monolamellar septa. [ˌdis-kər-ˈbā-ə]
discord *See* dissonance. [ˈdi,skȯrd]
discordance [GEOL] An unconformity characterized by lack of parallelism between strata which touch without fusion. [dis-ˈkȯrd-ən(t)s]
discordant pluton [GEOL] An intrusive igneous body that cuts across the bedding or foliation of the intruded formations. [dis-ˈkȯrd-ənt ˈplü,tän]
DISCOS *See* disturbance compensation system. [ˈdis,kȯs]
discount [IND ENG] A reduction from the gross amount, price, or value. [ˈdis,kaünt]
discount factor [PETRO ENG] The ratio of the present worth of one or a series of future payments to the total undiscounted amount of such future payments. Also known as average discount factor; deforment factor; present-worth factor. [ˈdis,kaünt ˌfak-tər]
discovery [MIN ENG] Finding of a valuable mineral deposit. [dis-ˈkəv-ə-rē]
discovery claim [MIN ENG] The first claim for the finding of a mineral deposit. [dis-ˈkəv-ə-rē ˌklām]
discovery vein [MIN ENG] The vein on which a mining claim is based. [dis-ˈkəv-ə-rē ˌvān]
discovery well [PETRO ENG] A successful exploration well. [dis-ˈkəv-ə-rē ˌwel]
discrete [ELECTECH] 1. Composed of separate and distinct parts. 2. Having an individually distinct identity. [dis-ˈkrēt]
discrete address beacon system *See* Mode S.
discrete comparator *See* digital comparator. [dis-ˈkrēt kam-pər-ād-ər]
discrete-film zone *See* belt of soil water. [dis-ˈkrēt ˌfilm ˌzōn]
discrete radio source [ASTRONPHY] A source of radio waves coming from a small area of the sky. [dis-ˈkrēt ˈrād-ē-ō ˌsȯrs]
discrete sampling [ELECTR] Sampling in which the individual samples are of such long duration that the frequency response of the channel is not deteriorated by the sampling process. [dis-ˈkrēt ˈsam-pliŋ]
discrete set [MATH] A set with no cluster points. [dis-ˈkrēt ˈset]
discrete sound system [ENG ACOUS] A quadraphonic sound system in which the four input channels are preserved as four discrete channels during recording and playback processes; sometimes referred to as 4-4-4 system. [dis-ˈkrēt ˈsau̇nd ˌsis-təm]
discrete spectrum [SPECT] A spectrum in which the component wavelengths constitute a discrete sequence of values rather than a continuum of values. [dis-ˈkrēt ˈspek-trəm]
discrete system [CONT SYS] A control system in which signals at one or more points may change only at discrete values of time. Also known as discrete-time system. [dis-ˈkrēt ˈsis-təm]
discrete-time system *See* discrete system. [dis-ˈkrēt ˌtīm ˈsis-təm]
discrete transfer function *See* pulsed transfer function. [dis-ˈkrēt ˈtranz-fər ˌfəŋk-shən]
discrete variable [MATH] A variable for which the possible values form a discrete set. [dis-ˈkrēt ˈver-ē-ə-bəl]
discrete-word intelligibility [CONSTRUN] The percent of intelligibility obtained when the speech units under consideration are words, usually presented so as to minimize the contextual relation between them. [dis-ˈkrēt ˌwərd in,tel-ə-jə-ˈbil-ə-dē]
discretization error [MATH] The error in the numerical calculation of an integral that results from using an approximate expression for the true mathematical function to be integrated. [ˌdis-krə-də-ˈzā-shən ˌer-ər]
discriminant [MATH] 1. The quantity $b^2 - 4ac$, where a,b,c are coefficients of a given quadratic polynomial: $ax^2 + bx + c$. 2. More generally, for the polynomial equation $a_0x^n + a_1x^{n-1} + \cdots + a_nx_0 = 0$, a_0^{2n-2} times the product of the squares of all the differences of the roots of the equation, taken in pairs. [dis-ˈkrim-ə-nənt]
discriminant function [STAT] A linear combination of a set of variables that will classify events or items for which the variables are measured with the smallest possible proportion of misclassifications. [di,skrim-ə-ˈnant ˈfəŋk-shən]
discrimination [COMMUN] 1. In frequency-modulated systems, the detection or demodulation of the imposed variations

DISCONE ANTENNA



A high-frequency discone antenna.

DISCORBACEA

Scanning electron micrograph of *Siphonina* from upper Eocene of Mississippi. (*B. B. McAddam, Chevron Oil Field Research Co.*)

STAT] The number $(1/N)[(v_i - \bar{v}) \ldots (w_N - \bar{w})]$, where v_i and w_i, $i = 1$, tained from two populations, and $\bar{v}$ neans. { ,päp·yə'lā·shən kō'ver·ē

.] The size of the population within { ,päp·yə'lā·shən 'den·səd·ē }
OL] The process by which groups the space or range within which they ·pər·səl }
IOL] The spatial distribution at any ndividuals of a species of plant or li'spər·zhən }
IL] The aggregate of processes that position of any population. { ,päp

·] The study of both experimental s of Mendelian heredity on the pop- es of gene frequencies, genotypes, ems. { ,päp·yə'lā·shən jə'ned·iks }
OM PHYS] The condition in which tomic system is more heavily pop- a lower energy state of the same i,vər·zhən }
The average of the numbers ob- opulation by measuring some quan- nber. { ,päp·yə'lā·shən ,mēn }
· regression equation [STAT] nditional mean of the dependent independent variables under the hip is linear; for the multivariate, always exists. { ,päp·yə¦lā·shən n i,kwā·zhən }
MECH] The number of members each of the allowed energy states n əv 'lev·əlz }
] The arithmetic average of the , where v_i are numbers obtained nbers, one for each member, and päp·yə'lā·shən 'ver·ē·əns }
orbital of an atomic electron with quantum number of unity. { 'pē

grade ceramic ware characterized , very low absorption, good trans- so known as European porcelain; elain. { 'pȯrs·ləo }
A fixed capacitor in which the porcelain, molecularly fused to electrodes to form a monolithic rmetic seal. { ¦pȯrs·lən kə'pas·

A cement for bonding porcelain re of gutta-percha and shellac.

lay suitable for use in the man- lly kaolin. Also known as por-

lay. { 'pȯrs·lən ,ərth }
enamel. { 'pȯrs·lən i'nam·əl }
An electrical insulator made often made in a one-fire pr[illegible] reen or unfired ware, in [illegible] in making ordinary p[illegible]

r·slə,nīt }
rd, naturally baked, im[illegible] of its red color had [illegible]
{ 'pȯr·slən 'jas·pər }
embling unglazed p[illegible]

, hard, opaque to su[illegible] racture surface and [illegible] ling chinaware or [illegible]
}
A family of ess[illegible] xillosina. { pȯr[illegible]

rock sliders, a[illegible]

pod crustaceans of the group Anomura which resemble true crabs but are distinguished by the reduced, chelate fifth pereiopods and the well-developed tail fan. { ,pȯr·sə'lan·ə,dē }

porcellanite [PETR] A hard, dense siliceous rock, such as impure chert or indurated clay or shale. { pȯr'sel·ə,nīt }

porcupine [VERT ZOO] Any of about 26 species of rodents in two families (Hystricidae and Erethizontidae) which have spines or quills in addition to regular hair. { 'pȯr·kyə,pīn }

porcupine boiler [MECH ENG] A boiler having dead end tubes projecting from a vertical shell. { 'pȯr·kyə,pīn ¦bȯil·ər }

pore [ASTRON] A very small, dark area on the sun formed by the separation of adjacent flocculi. [BIOL] Any minute opening by which matter passes through a wall or membrane. [GEOL] An opening or channelway in rock or soil. [MET] A minute cavity in a powder compact, metal casting, or electroplated coating. { pȯr }

pore compressibility [GEOL] The fractional change in reservoir-rock pore volume with a unit change in pressure upon that rock. { 'pȯr kəm,pres·ə'bil·əd·ē }

pore diameter [DES ENG] The average or effective diameter of the openings in a membrane, screen, or other porous material. { 'pȯr dī,am·əd·ər }

pore diffusion [FL MECH] The movement of fluids (gas or liquid) into the interstices of porous solids or membranes; occurs in membrane separation, zeolite adsorption, dialysis, and reverse osmosis. { 'pȯr di,fyü·zhən }

pore fungus [MYCOL] The common name for members of the families Boletaceae and Polyporaceae in the group Hymenomycetes; sporebearing surfaces are characteristically within tubes or pores. { 'pȯr ,fəŋ·gəs }

pore ice [HYD] Ice which fills or partially fills pore spaces in permafrost; forms by freezing soil water in place, with no addition of water. { 'pȯr ,īs }

porencephaly [MED] A condition in which the cavity of a lateral ventricle extends to the surface of the cerebral hemisphere; may result from brain tissue destruction or maldevelopment. { ,pȯr·ən'sef·ə·lē }

pore pressure *See* neutral stress. { 'pȯr ,presh·ər }

pore-size distribution [GEOL] Variations in pore sizes in reservoir formations; each type of rock has its own typical pore size and related permeability. { 'pȯr¦sīz ,dis·trə'byü·shən }

pore space [GEOL] The pores in a rock or soil considered collectively. Also known as pore volume. { 'pȯr ,spās }

pore volume *See* pore space. { 'pȯr ,väl·yəm }

pore-water pressure *See* neutral stress. { 'pȯr ¦wȯd·ər ,presh·ər }

poriaz [METEOROL] Violent northeast winds on the Black Sea near the Bosporus. { 'pȯr·ē,äz }

Porifera [INV ZOO] The sponges, a phylum of the animal kingdom characterized by the presence of canal systems and chambers through which water is drawn in and released; tissues and organs are absent. { pə'rif·ə·rə }

Porlezzina [METEOROL] An east wind on Lake Lugano (Italy and Switzerland), blowing from the Gulf of Porlezza. { ,pȯr·lət'sē·nə }

porocyte [INV ZOO] One of the perforated, tubular cells which constitute the wall of the incurrent canals in certain Porifera. { 'pȯr·ə,sīt }

porogamy [BOT] Passage of the pollen tube through the micropyle of an ovule in a seed plant. { pō'räg·ə·mē }

poromeric material [TEXT] A fabric made of polyurethane strengthened by polyester. { ¦pȯr·ō¦me·trik mə'tir·ē·əl }

porosimeter [ENG] Laboratory compressed-gas device used for measurement of the porosity of reservoir rocks. { ¦pȯr·ə'sim·əd·ər }

porosis [MED] Condition characterized by increased porosity, as of bone. { pə'rō·səs }

porosity [PHYS] **1.** Property of a solid which contains many minute channels or open spaces. **2.** The fraction as a percent of the total volume occupied by these channels or spaces; for example, in petroleum engineering the ratio (expressed in percent) of the void space in a rock to the bulk volume of that rock. { pə'räs·əd·ē }

porosity feet [PETRO ENG] Reservoir porosity fraction multiplied by net pay in feet, where porosity fraction is the portion [illegible]oir that is porous, and net pay is the depth and areal [illegible] of the hydrocarbons-containing reservoir. { pə'räs·əd·ē [illegible] }

[illegible] trap *See* stratigraphic trap. { pə'räs·əd·ē ,trap }

porous [MATER] **1.** Filled with pores. **2.** Capable of absorbing liquids. { 'pȯr·əs }

porous alum *See* aluminum sodium sulfate. { 'pȯr·əs 'al·əm }

porous bearing [DES ENG] A bearing made from sintered metal powder impregnated with oil by a vacuum treatment. { 'pȯr·əs 'beriŋ }

porous carbon [MATER] Plates, tubes, or disks of uniform carbon particles pressed together without a binder; used for the filtration of corrosive liquids and gases. { 'pȯr·əs 'kär·bən }

porous graphite [MATER] Plates, tubes, or disks of uniform graphite particles pressed together without a binder; more resistant to oxidation but lower in strength than porous carbon. { 'pȯr·əs 'gra,fīt }

porous metals [MET] Metals, made by powder metallurgy, having uniformly distributed controlled pore sizes, in the form of sheets, tubes, and shapes; used for filtering liquids and gases at elevated temperatures. { 'pȯr·əs 'med·əlz }

porous mold [ENG] A plastic-forming mold made from bonded or fused aggregates (such as powdered metal or coarse pellets) so that the resulting mass contains numerous open interstices through which air or liquids can pass. { 'pȯr·əs 'mōld }

porous reservoir model [PETRO ENG] Scaled laboratory model of porous reservoir used for the study of reservoir areal waterflood efficiencies. { 'pȯr·əs 'rez·əv,wär ,mäd·əl }

porous wheel [DES ENG] A grinding wheel having a porous structure and a vitrified or resinoid bond. { 'pȯr·əs 'wēl }

Poroxylaceae [PALEOBOT] A monogeneric family of extinct plants included in the Cordaitales. { pə,räk·sə'lās·ē,ē }

porpezite [MINERAL] A mineral consisting of a native alloy of palladium (5–10%) and gold. Also known as palladium gold. { 'pȯr·pə,zīt }

porphin [BIOCHEM] A heterocyclic ring consisting of four pyrrole rings linked by methine (—CH=) bridges; the basic structure of chlorophyll, hemoglobin, the cytochromes, and certain other related substances. { 'pȯr·fən }

porphobilinogen [BIOCHEM] $C_{10}H_{14}O_4N_2$ Dicarboxylic acid derived from pyrrole; a product of hemoglobin breakdown that gives the urine a Burgundy-red color. { ¦pȯr·fō·bə'lin·ə·jən }

porphrite *See* porphyry. { 'pȯr,frīt }

porphyria [MED] A usually hereditary, pathologic disorder of porphyrin metabolism characterized by porphyrinuria and photosensitivity. { pȯr'fir·ē·ə }

porphyrin [BIOCHEM] A class of red-pigmented compounds with a cyclic tetrapyrrolic structure in which the four pyrrole rings are joined through their α-carbon atoms by four methene bridges (=C—); the porphyrins form the active nucleus of chlorophylls and hemoglobin. { 'pȯr·fə·rən }

porphyrinuria [MED] The excretion of large quantities of porphyrin in the urine. { ,pȯr·fə·rə'nyu̇r·ē·ə }

porphyritic [PETR] Pertaining to or resembling porphyry. { ¦pȯr·fə¦rid·ik }

porphyroblast [PETR] A relatively large crystal formed in a metamorphic rock. { pȯr'fir·ə,blast }

porphyroblastic [PETR] Pertaining to the texture of recrystallized metamorphic rock having large idioblasts of minerals possessing high form energy in a finer-grained crystalloblastic matrix. { pȯr¦fir·ə¦blas·tik }

porphyrocrystallic *See* porphyrotopic. { pȯr¦fir·ō·kri¦stal·ik }

porphyroclastic structure *See* mortar structure. { pȯr¦fir·ō¦klas·tik 'strək·chər }

porphyrogranulitic [PETR] Referring to ophitic texture characterized by large phenocrysts of feldspar and augite or olivine in a groundmass of smaller lath-shaped feldspar crystals and irregular augite grains; a combination of porphyritic and intergranular textures. { pȯr¦fir·ō,gran·yə'lid·ik }

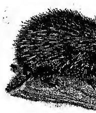
porphyroid [PETR] **1.** A blastoporphyritic, or sometimes porphyroblastic, metamorphic rock of igneous origin. **2.** A feldspathic metasedimentary rock having the appearance of a porphyry. { 'pȯr·fə,rȯid }

porphyroskelic [GEOL] Pertaining to an arrangement in a soil fabric whereby the plasma occurs as a dense matrix in which skeleton grains are set like phenocrysts in a porphyritic rock. { pȯr¦fir·ə¦skel·ik }

porphyrotope [GEOL] A large crystal enclosed in a finer-grained matrix in a sedimentary rock showing porphyrotopic fabric. { pȯr'fir·ə,tōp }

porphyrotopic [GEOL] Referring to the fabric of a crystalline

PORCUPINE



The Canadian porcupine (*Erethizon dorsatum*), about 3½ feet (1 meter) long.

PORIFERA

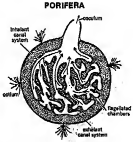


Diagram of the canal system of a young fresh-water sponge.